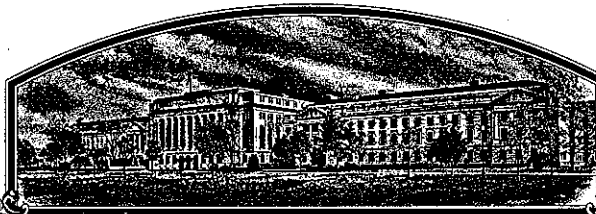


No.

8300023



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Dickseed West, Inc.

Whereas, THERE HAS BEEN PRESENTED TO THE
Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.

TALL FESCUE

'Mustang'

In Testimony Whereof, I have hereunto set
my hand and caused the seal of the Plant
Variety Protection Office to be affixed
at the City of Washington
this 29th day of June in
the year of our Lord one thousand nine
hundred and eighty-four.

Attest:

Bennett H. Evans
Commissioner
Plant Variety Protection Office
Livestock, Meat, Grain & Seed Division
Agricultural Marketing Service

John R. Block
Secretary of Agriculture

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN & SEED DIVISION

FORM APPROVED: OMB NO. 0581-0005

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 553).

1. NAME OF APPLICANT(S) Pickseed West, Inc.		2. TEMPORARY DESIGNATION RP-1	3. VARIETY NAME Mustang
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) P.O. Box 888, Tangent, Oregon 97389		5. PHONE (Include area code) (503) 926-8886	FOR OFFICIAL USE ONLY PVPO NUMBER 8300023
6. GENUS AND SPECIES NAME Festuca arundinacea	7. FAMILY NAME (Botanical) Gramineae		FILING DATE 12/27/82 TIME 3:30 <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.
8. KIND NAME Tall Fescue	9. DATE OF DETERMINATION June 27, 1980		FEES RECEIVED AMOUNT FOR FILING \$ 1,000 DATE 12/27/82 AMOUNT FOR CERTIFICATE \$ 500.00 DATE 5/16/84
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Corporation			
11. IF INCORPORATED, GIVE STATE OF INCORPORATION Oregon			12. DATE OF INCORPORATION 12-23-69
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS 9/28/83 DR GERALD PEPIN DIRECTOR OF RESEARCH 88/14 Mike Robinson, Vice President Marketing Pickseed West, Inc.			

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED

- a. ☒ Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- b. ☒ Exhibit B, Novelty Statement
- c. ☒ Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- d. ☒ Exhibit D, Additional Description of the Variety

15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.) ☐ Yes (If "Yes," answer items 16 and 17 below) ☒ No

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☒ Yes ☐ No

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? ☒ Foundation ☒ Registered ☒ Certified

18. DID THE APPLICANT(S) FILE FOR PROTECTION OF THE VARIETY IN THE U.S. OR OTHER COUNTRIES? ☐ Yes (If "Yes," give names of countries and dates) ☒ No

19. HAVE RIGHTS BEEN GRANTED IN THE U.S. OR OTHER COUNTRIES? ☐ Yes (If "Yes," give names of countries and dates) ☒ No

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT <i>Mike Robinson</i>	DATE December 24, 1982
SIGNATURE OF APPLICANT <i>Walter Wiley</i>	DATE December 24, 1982

ORIGIN AND BREEDING HISTORY OF MUSTANG TALL FESCUE

Mustang is an advanced generation synthetic cultivar selected from the progenies of 65 clones. Twenty-eight of the parent clones of Mustang come from breeding program A initiated in 1961. Plant collections were made from old turfs throughout Connecticut, Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia, and Washington, D.C. Promising accessions were obtained from the United States Plant Introduction Program. Trispecies hybrids of tall fescue (Festuca arundinacea Schreb.), meadow fescue (F. pratensis Huds.), and perennial ryegrass (Lolium perenne L.) were obtained from the United States Regional Pasture Research Laboratory, University Park, Pennsylvania. The most promising selections from each of the above sources were established in spaced-plant clonal nurseries which were later interseeded with Linn perennial ryegrass and maintained at a 5-cm mowing height. Tillers from selected clones were subsequently grown in isolated spaced-plant seed production nurseries. Open-pollinated seed was harvested from selected plants and used to establish 130 single plant progeny plots maintained at a 2-cm mowing height. These first cycle seeded turf trials were planted at New Brunswick, New Jersey, in September 1964. Plots of all standard cultivars and most progenies were severely thinned by the stress of frequent, close mowing. Surviving tillers were selected from the best plots and used to establish a second isolated spaced-plant seed production nursery in August 1968. A substantial percentage of the tillers selected at this time came from the open-pollinated seed of clone FA 2R collected from a lawn on the campus of Princeton University and from clone CM8 collected from a lawn in Cape May, New Jersey. Open-pollinated seed was harvested from selected plants and used to establish 330 second cycle single plant progeny turf plots at New Brunswick during September 1969, and August 1970. These second cycle turf trials were maintained at a 2-cm mowing height which again resulted in severe thinning of all standard cultivars and most progenies. Tillers were selected from the best plots during August 1972 and established in an isolated spaced-plant seed production nursery. This nursery was rouged to remove unattractive plants prior to anthesis. Open-pollinated seed was harvested from selected plants and used to establish nearly 1,000 third cycle, single plant progenies at Adelphia, New Jersey during August 1973. These third cycle plots were mowed at 2-cm. All standard cultivars showed severe thinning. However, a substantial percentage of the single plant progeny plots continued to produce a full stand of attractive turf. Tillers were selected from the best third cycle progeny plots during August 1974 and planted in an isolated nursery where unattractive plants were removed prior to anthesis. Over 500 fourth cycle, single plant progeny plots

were seeded at North Brunswick in August 1975 and mowed at 2-cm. Tillers selected from the best performing plots were established in a spaced-plant nursery. Drought stress during May of 1977 caused extensive wilting in this nursery. Attractive plants showing the least disease and wilting were transplanted to an isolation nursery for seed production. Progeny trials of each selected plant were seeded in turf trials at Adelphia during September 1977. The best performing clones were used to produce breeding composite A.

Tall fescue breeding program B was initiated in 1972. An extensive germplasm collection effort involving approximately 200 days spent examining old turfs resulted in the discovery of a number of promising tall fescue clones. Significant collection efforts were made in: Alabama, California, Delaware, Georgia, Idaho, Kansas, Kentucky, Maryland, New Jersey, New York, Mississippi, Missouri, North Carolina, Ohio, Pennsylvania, Tennessee, Utah, Virginia, and Washington, D.C. Accessions were evaluated in clonal nurseries where the most promising were selected for progeny trials in closely mowed turf plots. Thirty-seven of the parental clones of Mustang were derived from germplasm generated in this program.

During August, 1978, 11,200 tall fescue plants from tall fescue breeding programs A and B were transferred to a mowed, clonal evaluation trial at North Brunswick. An old Merion Kentucky bluegrass turf had been partially killed by Roundup. The tall fescue selections were planted in the remaining sod without otherwise disturbing the soil. They were subsequently mowed at 5-cm as needed. This test was uniformly and seriously damaged by the *Helminthosporium* blight disease during the spring of 1979. At this time, a total of 161 clones were selected and transferred to an isolated seed production block. Selection was based on attractive appearance, soft leaves and apparent resistance to *Helminthosporium* blight. Progenies of the 161 selected clones were established in closely mowed turf trials at Adelphia during September, 1979, along with a large number of varieties and experimental selections. A substantial amount of *Helminthosporium* blight developed in this test during the late fall of 1979. The progenies of the 161 clones selected for resistance to *Helminthosporium* blight generally exhibited significantly less damage from this disease compared with the other entries being tested. Moreover, some progenies showed significantly less disease than others. Based on disease reaction and subsequent turf performance, 96 of the clones were discarded. Syn I seed of Mustang was harvested from those 65 clones remaining. The original germplasm sources of the 65 parental clones of Mustang are:

<u>Source of Germplasm</u>	<u>No. of Clones</u>
Breeding Composite A	28
Breeding Composite B	37
Virginia	9
North Carolina	7
New Jersey	6
Idaho	5
Pennsylvania	5
Georgia	3
Alabama	2
 Total	 65

Syn 2 breeder seed of Mustang was produced in a large spaced-plant nursery located near Albany, Oregon. This nursery was rouged for uniformity of maturity and to remove unattractive, off-type plants.

PICKSEED®

Pickseed West Inc.
P.O. Box 888, Tangent, Oregon 97389
Phone (503) 926-8886 LD-926-8888
Telex 360888, Cable: PICKWEST

MUSTANG TALL FESCUE
8300023

Addendum to Exhibit 14a

In the multiplication and seed increase of Mustang, no significant variants have been observed. There is plant to plant variation in Mustang - as would be expected in a $2n=42$ chromosome hexaploid - but no more than would normally be expected.

Turf plot comparison of breeder, foundation, and certified seed of Mustang have shown no variations in performance or appearance. This indicates that Mustang is a stable variety.

Exhibit B

Novelty Statement For Mustang Tall Fescue

Mustang most closely resembles Olympic but is distinguished by better resistance to Netblotch disease incited by Helminthosporium dictyoides F. sp. dictyoides. Under close mowing, Mustang is darker green in color than Olympic. Mustang is also significantly later in date of 50% heading than Olympic.

Table 1.

Reaction of tall fescue varieties and selections to the *Helminthosporium* blight (netblotch) disease in turf trials seeded September 1979 at Adelphia, New Jersey.

Variety	Disease rating 9 = most
MUSTANG	1.6
Brookston	2.6
Jaguar	2.8
Olympic	2.9
Adventure	3.4
Falcon	3.5
Hounddog	3.9
Rebel	4.7
Kenhy	5.1
Galway	5.1
Kenmont	5.4
Clemfine	5.7
Kenwell	5.8
Beltsville 16-1	6.3
Kentucky 31	6.4
Beltsville TF-11	6.5
Kentucky blend	6.8
Beltsville TF-25	6.9
Beltsville KpH-1	7.3
Goar	8.3
LSD at 5%	0.9

Table 2. Reaction of tall fescue cultivars to the netblotch disease caused by *Helminthosporium dictyoides* in turf trials seeded September 1982 at North Brunswick, New Jersey.

Cultivar	Netblotch	
	Nov. 1982	Dec. 1982
	9 = least disease	
1. PS 5L4	7.6	
2. Mustang	7.5	
3. Apache	6.9	
4. Olympic	6.8	
5. Jaguar	6.8	
6. Brookston	6.1	
7. Finelawn I	6.0	
8. Adventure	5.7	
9. Hounddog	5.7	
10. Falcon	5.6	
11. Marathon	5.6	
12. Arid	5.5	
13. Syn 813	5.5	
14. Syn GA-82	5.4	
15. Rebel	5.4	
16. Maverick	5.4	
17. Clemfine	5.3	
18. Johnstone	5.3	
19. ASTF PX 82SP	5.1	
20. Kentucky 31	4.8	
21. Kenhy	4.6	
22. ASTF PX 82F	4.0	
23. Mom Fa 183	1.9	
LSD at 5%	0.7	

"Mustang" Tall Fescue
8300023

Table 3

*Date of 50% Heading of Tall Fescue Cultivars at
Tangent, Oregon in 1983

<u>Cultivar</u>	<u>Date of 50% Heading</u>
Mustang	May 17
Olympic	May 11
Rebel	May 12
Falcon	May 10
Alta	May 2
LSD. 05	3 days

*Data taken in summer 1983 from spaced plants that were field transplanted at Tangent, Oregon in October 1982. Each variety was represented by a total of 60 plants in 3 replications (20 plants per replication).

Table 4. Color ratings of commercially available cultivars
in National Tall Fescue test 2 at Adelphia, New Jersey.*

Cultivar	Color rating** 9 = darkest color
1. Mustang	7.2
2. Olympic	7.0
3. Jaguar	6.9
4. Apache	6.8
5. Hounddog	6.5
6. Arid	6.4
7. Maverick	6.3
8. Finelawn I	6.3
9. Rebel	6.2
10. Willamette	6.2
11. Adventure	6.2
12. Brookston	5.5
13. Falcon	5.5
14. Tempo	5.4
15. Kenhy	4.6
16. Clemfine	4.4
17. Ky-31	4.3
18. Barcel	4.0
19. Johnstone	3.7
LSD at 5%	0.7

*Turf trial seeded September 1983 and mowed at 2 inches

**Average of three separate ratings by two individuals on
December 14 and December 15, 1983

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
LIVESTOCK, MEAT, GRAIN AND SEED DIVISION
PLANT VARIETY PROTECTION OFFICE
BELTSVILLE, MARYLAND 20705

EXHIBIT C
(Tall & Meadow Fescues)

OBJECTIVE DESCRIPTION OF VARIETY

TALL & MEADOW FESCUES

(Festuca spp.)

NAME OF APPLICANT(S) Pickseed West, Inc.	TEMPORARY DESIGNATION RP-1	VARIETY NAME Mustang
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) P.O. Box 888, Tangent, Oregon 97389		FOR OFFICIAL USE ONLY
		PVPO NUMBER 8300023

Place the appropriate number that describes the varietal character of this variety in the boxes below. Use leading zeroes when necessary (e.g., or). Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors; designate system used: Tangent and Hubbard, Oregon. Describe location of test area, conditions and number of plants used 60 spaced-plants used (3 reps of 20 each)

1. SPECIES: (With comparison varieties for use below — use varieties within species of application variety)

- | | | | | |
|---|---------------|------------------|---------------|------------------|
| <input type="text" value="1"/> 1 = <i>F. arundinacea</i> (Tall) | 11 = Alta | 12 = Fawn | 13 = Goar | 14 = Kentucky-31 |
| | 15 = Festal | 16 = S.170 | 17 = Rebel | 18 = Manade |
| | 19 = Kenhy | 20 = Missouri 96 | | |
| 2 = <i>F. pratensis</i> (Meadow) | 21 = Ensign | 22 = Trader | 23 = Beaumont | 24 = Admira |
| | 25 = Comtessa | | | |

2. CYTOLOGY:

 Chromosome Number

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

 Transition Zone West Other (Specify) Upper mid-west and Northeast
4. MATURITY: (Date First Headed, panicle emergence) Location(s) of Trial(s) Tangent, Oregon. First year spaced plants

Maturity Class:
1 = Very early () 2 = Early (Alta, Fawn, S.170) 3 = Medium early (K31, Falcon)
4 = Medium late (Barundi, Rebel, Ensign, Kenhy) 5 = Late ()

Date Headed 50% - 5/17

<input type="text" value="0"/> <input type="text" value="5"/>	Days earlier than	<input type="text" value="0"/> <input type="text" value="5"/>	} Comparison Variety
	Maturity same as	<input type="text" value="0"/> <input type="text" value="5"/>	
	Days later than	<input type="text" value="1"/> <input type="text" value="7"/>	

* 5. PLANT HEIGHT (Average of 10 tallest culms):

<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	mm Height (at maturity to top of panicle)		} Comparison Variety
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	mm Shorter than	<input type="text" value="0"/> <input type="text" value="0"/>	
	Mature Height same as	<input type="text" value="0"/> <input type="text" value="0"/>	
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	mm Taller than	<input type="text" value="0"/> <input type="text" value="0"/>	} Comparison Variety
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	mm Height (at ear emergence)		
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	mm Shorter than	<input type="text" value="0"/> <input type="text" value="0"/>	
	Emergence height same as	<input type="text" value="0"/> <input type="text" value="0"/>	} Comparison Variety
<input type="text" value="0"/> <input type="text" value="0"/> <input type="text" value="0"/>	mm Taller than	<input type="text" value="0"/> <input type="text" value="0"/>	

* Data from first year spaced plants is available but was not used because it is not typical of mature plants.

11

5. PLANT HEIGHT: (Continued)

<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Internode length (spring)				
<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Shorter than		<input type="text"/>	<input type="text"/>	
			Internode same as		<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Longer than		<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Width of plant (at ear emergence)				

Comparison Variety

6. GROWTH HABIT (Mature):

<input type="text"/>	2	1 = Erect, foliage stiff-upright (Kentucky 31)	2 = Semi-erect (Beaumont, Rebel)
		3 = Lax (Aberystwyth S.53)	

7. RHIZOMES (Pseudo):

<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Length	<input type="text"/>	2	1 = Absent	2 = Rare (Rebel)	3 = Common
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8. LEAF BLADE:

<input type="text"/>	Color:	1 = Light Green (Roa)	2 = Medium Light Green (Beaumont, Kentucky 31)				
		3 = Medium Dark Green (Rebel)	4 = Dark Green ()				
<input type="text"/>	Anthocyanin:	1 = Absent	2 = Present	<input type="text"/>	Hairs (Basal)	1 = Absent	2 = Present
<input type="text"/>	Margins:	1 = Smooth	2 = Semi-rough	3 = Rough			
<input type="text"/>	Width Class:	1 = Fine ()	2 = Medium Fine (Rebel, Monaco)	3 = Medium Coarse (K-31, Barundi)			
		4 = Coarse (Kenhy)	5 = Very Coarse (Hazel)				
<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Length (Flag Leaf)				
<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Shorter than		<input type="text"/>	<input type="text"/>	
			Blade length same as		<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Longer than		<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Width				
<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Narrower than		<input type="text"/>	<input type="text"/>	
			Blade width same as		<input type="text"/>	<input type="text"/>	
<input type="text"/>	<input type="text"/>	<input type="text"/>	mm Wider than		<input type="text"/>	<input type="text"/>	

Comparison Variety

9. LEAF SHEATH:

<input type="text"/>	Anthocyanin (seedling):	1 = Absent (Kentucky 31)	2 = Present (Kenhy, Forager)
<input type="text"/>	Auricle Hairiness:	1 = Absent	2 = Present

10. PANICLE (Mature Plant):

<input type="text"/>	Shape:	1 = Narrow-tapering	2 = Ovate	3 = Oblong	4 = Other (Specify) _____
<input type="text"/>	Type:	1 = Open	2 = Intermediate	3 = Compact (appressed)	
<input type="text"/>	Orientation:	1 = Erect	2 = Nodding		
<input type="text"/>	Branch Pubescence:	1 = Glabrous	2 = Pubescent		
<input type="text"/>	Anther Color:				
<input type="text"/>	Glume Color (At 50% Flowering):	1 = Yellowish Green	2 = Green	3 = Bluish Green	
		4 = Purplish	5 = Reddish	6 = Other (Specify) _____	

10. PANICLE: (Continued)

230

mm Length (from base of panicle branch to the tip)

05

mm Shorter than

14

Panicle length same as

12

11

mm Longer than

11

Comparison Variety

11. PALEA:

1

HAIRS (On keels or margins):

1 = Absent

2 = Short (Missouri 96)

3 = Long (

)

12. LEMMA:

1

HAIRS:

1 = Absent (Kenhy)

2 = Several

3 = Many (Missouri 96)

62

mm Lemma Length (Mature)

mm Shorter than

mm

Lemma length same as

mm

mm Longer than

mm

Comparison Variety

145

mm Lemma Width

mm Narrower than

mm

Lemma width same as

mm

mm Wider than

mm

Comparison Variety

AWNS:

1 = Absent (Beaumont)

2 = Present (Falcon, Barundi)

Mostly lacking - short when present.

18

mm Awn Length

mm Shorter than

mm

Awn length same as

mm

mm Longer than

mm

Comparison Variety

13. SEED (With Lemma & Palea):

1871

mg per 1000 seed

456

mg per 1000 seed less than

17

Seed weight same as

mm

Comparison Variety

mg per 1000 seed more than

mm

14. DISEASE, INSECT, AND NEMATODE REACTION (0 = Not Tested; 1 = Susceptible; 2 = Resistant)

2

Melting-out *Drechslera poae*
(*Helminthosporium vagans*)

0

Blind Seed *Gloeotinia temulenta*

2

Leaf Spot *D. siccas*

0

S. Patch *Sclerotinia homoeocarpa*

2

Net Blotch *D. dictyoides*

2

Stripe Smut *Ustilago striiformis*

2

Brown Patch *Rhizoctonia solani* Moderately

0

O. Patch *Ophiobolus graminis*

0

C. Leaf Spot *Cercospora fectuceae*

0

T. Blight *Typhula incarnata*

0

Pink Snow Mold *Fusarium nivale*

1

Pythium Blight *Pythium* spp.

0

Silver Top *F. trichinctum*, *F. roseum*

2

Powdery Mildew *Erysiphe graminis*

2

Crown Rust *Puccinia coronata*

0

Nematode

14. DISEASE, INSECT, AND NEMATODE REACTION: (Continued)

<input type="checkbox"/>	Insect _____
<input type="checkbox"/>	Other _____
<input type="checkbox"/>	Other _____

15.

<input type="checkbox"/>	PHOTOPERIOD:	1 = Non-sensitive	2 = Sensitive
--------------------------	--------------	-------------------	---------------

16.

<input checked="" type="checkbox"/>	WINTER HARDINESS:	1 = Susceptible	2 = Resistant
-------------------------------------	-------------------	-----------------	---------------

17. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics indicate Degree of Resemblance by placing in the column marked, D.R., one of the following numbers:

1 = Application variety is less than comparison variety 2 = Same as
 3 = More than, better, greater, darker, more disease resistant, etc.

CHARACTER	VARIETY	D.R.	CHARACTER	VARIETY	D.R.
Leaf Width	Olympic	2	Leaf Color	Olympic	3
Panicle Color	Olympic	2	Panicle Shape	Olympic	2
Seed Size	Olympic	1	Cold Injury	Olympic	2
Winter Color	Olympic	2	Heat	Olympic	2
Shade Tolerance	Olympic	2	Disease*	Olympic	3
Drought Tolerance	Olympic	2			

* Specify each disease evaluated.

18. ADDITIONAL DESCRIPTION: (Use additional sheets as required)

Describe all characteristics that cannot be adequately described in the form above in Exhibit D. Comparative varieties should be used as may be appropriate, such as for disease. Append all comparative trial and evaluation data, including measured characters, environmental, and disease tests.

*Helminthosporium blight (netblotch)

Table 2.

Fifty Percent Heading Dates of Tall Fescues
In Yield Trials Near Hubbard, Oregon

Variety	50% Heading Date
Kentucky 31	5/8
Falcon	5/13
Olympic	5/15
Rebel	5/18
MUSTANG	5/17

